

Cracklin' Static

January 2025 Edition



SIERRA NEVADA
Amateur Radio Society

SNARS BREAKFAST MEETING SET FOR DECEMBER 7

See Page 3 for details!

SNARS NET on DMR – Tuesdays 8pm DMR Talk Group: 31328 SNARS

SNARS Treasury Closing Balances

As of December 28, 2024

Operating	\$1833
Convention	\$4061
Self Insurance	\$17014
Savings	\$4116
PayPal	\$908
Total	\$27931

Net Income / Year	\$1375
Net Income / Month	\$2776
Memberships	6

Donations	
PayPal Giving	\$24
Members	\$2972
Total	\$2996

Notes:

1. Transferred \$1,300 from Paypal to Operating
2. Purchased raffle prizes and paid Holiday Dinner Expenses
3. Paid Lower Peavine Lease
4. Transferred \$500 from Pay to Operating
5. Paid 2025 Insurance

SNARS Membership as of November 28, 2024

Total	393	
Extra	135	34%
Technician	127	32%
General	115	29%
Advanced	13	3%
No License	3	1%

SNARS members ARRL:	245	61%
Life members ARRL:	36	9%

SNARS ARRL Members 281 72%

Volunteer Examiners (VE's): 48 12%

PRESIDENT'S VOICE

SNARS PRESIDENT BARRY BETTMAN, K6ST



Happy 2025 New Year everyone!

The sunspot cycle 25 is peaking so there should be plenty of dx on the bands. There's a good article in January 2025 QST saying: "John Keating, K7LY, digs into various types of data from this solar cycle and others, in an attempt to determine how reliable peaks in data predict good propagation."



Feel free to check out this article courtesy of ARRL, "Looking at the Sun K7LY discusses whether big peaks in daily sunspot numbers or the solar flux index are reliable indicators of good propagation".

Read Article

https://www.arrl.org/files/file/QST/This%20Month%20in%20QST/2025/Jan%2025/Keating_0125%20free%20article.pdf

Last month in December SNARS has a really nice holiday luncheon at the Wild River Grill in Reno. We had 44 attend and they enjoyed the food, camaraderie, as well as many prizes. Thanks to everyone for a wonderful event!

ARRL Straight Key Night



It's SKN show time!

SKN short for Straight Key Night is a 24-hour event is not a contest; rather it is a day dedicated to celebrating our CW heritage. Participants are encouraged to get on the air and simply make enjoyable, conversational CW QSOs. The use of straight keys or bugs to send CW is preferred. There are no points scored and all who participate are winners.

ARRL Straight Key Night is held every January 1 from 0000 UTC through 2359 UTC, which is Reno local time December 31st from 4:00PM PST through January 1st 3:59PM PST. All authorized Amateur frequencies, but activity has traditionally been centered on the HF bands. For more information go to:

<https://arrl.org/straight-key-night>

This month on Saturday January 4, 2025 we will have the first SNARS meeting of the year at our favorite Jacks Coffee Shop #2 605 N Wells Ave, Reno and hybrid on zoom. Our presentation will be "ARRL Update" with W7XM Anthony Marcin, ARRL Pacific Division Director. Please register <https://snars.org/monthly-meeting/>



Also on Saturday January 4, 2025 is the ARRL Kids Day event.

<https://www.arrl.org/Kids-Day> It's a great way to have kids experience ham radio.



SNARS is off to a great new year. Please feel free to let me know your interests for 2025 and how you might be able to help out too.

73, K6ST Barry k6st@arrl.net



PO BOX 7727 Reno NV 89510

Yearly Dues: \$40.00 Individual • \$50.00 Family

2025 Officers

President..... Barry Bettman, K6ST
Vice-President..... Krystal Nelson AJ6GC
Treasurer..... Doug Edmondo, W7DBE
Secretary..... Anthony Marcin, W7XM
Director John Byerly, N7ROJ
Director Jim Shepherd, W6US
Director Greg Krantz NT7Q

2025 Staff

Cracklin Static	Howie Holden, WB2AWQ
W7TA Trustee	Peter DeBay, KE7VSR
KR7ENO Trustee	Howie Holden, WB2AWQ
Control Operator	Pat Sheehan, W7DED
Youth Involvement	Barry Bettman K6ST
NVQSO Coordinator	Jim Shepherd, W6US
Historian	Robin Maguire-Jones KF7VVE
Tech Team Lead	Pat Sheehan, W7DED
Membership	Kim Farnham, KG7TMA
PIO	Vacant
VE Coordinator	Krystal Nelson, AJ6GC
Meeting Greeter	Bill Jones, AE7OX
DMR Net Manager	Anthony Marcin, W7XM
Reno Ham Swap	Wes Vick, KG7QXE
Webmaster	Erik Andreasen, K6CZH
Club Sales Manager	Vacant
Recording Secretary	Doug Edmondo, W7DBE
Equipment Manager	Tyler Maggert, K7TDM

Cracklin Static Publication

Editor: Howie Holden WB2AWQ - holden7471@msn.com
Cracklin' Static is the Newsletter of, and sponsored by the Sierra Nevada Amateur Radio Society. Cracklin' Static is published the week before meetings. Opinions expressed herein are those of the editors and contributors and should not be considered as official expressions of the Club Officers, Staff or Club Members, or as endorsements by same.

Material for publication may be edited to enhance readability or to save space. We reserve the right to use whatever font size, line spacing or other tools as may be required to publish this Newsletter. **Deadline for input to the newsletter is 1500 hours on the Sunday** prior to the 1st Saturday (or whichever Saturday is the meeting) of each month.

SNARS Wide Area Linked System

147.030 + PL 123.0	Sparks, Fernley, Fallon	Online
147.210 + PL 100.0	Reno, Sparks	Online
147.150 + PL 123.0	Lake Tahoe, Truckee, Carson	Online
146.925 - PL 123.0	Lovelock, Fallon	Online
146.670 - PL 123.0	Winnemucca	Not Linked
444.875 + PL 100.0	Yerington	Online
444.125 + PL 123.0	Reno Sparks (coming soon)	Online

DMR Systems

444.925 + CC 1	Reno, Sparks	Online
444.825 + CC 1	Dayton, Fallon, Carson	Online
443.925 + CC 1	Lake Tahoe, Truckee, Carson	Online
443.950 + CC 1	Incline Village	Online
442.875 + CC 1	Sparks, Fernley, Fallon	Online
442.850 + CC 1	Downtown Reno	Online
441.950 + CC 1	Fallon, Fernley	Online

Fusion Systems

146.610—DGID 28	Reno, Carson, Dayton	Online
-----------------	----------------------	--------

IRLP / EchoLink Systems

147.300 + PL 123.0	Reno, Sparks	Not Linked
--------------------	--------------	------------

Packet / APRS

145.050 - RNO	Reno, Carson, Dayton	Online
145.050 - ROSE	Lake Tahoe, Truckee, Carson	Online
144.390 - TOULON	Lovelock, Fallon	Offline

Standalone Systems

147.390 + PL 100.0	Reno, Carson, Dayton	Online
443.075 + PL 123.0	Reno, Carson, Dayton	Online
927.0875 + PL 114.8	Reno, Carson, Dayton	Online

Online
 Offline
 Not Linked

Visit <https://snars.org/repeaters/analog> for additional updates/status on repeaters.

SNARS In-Person and Virtual Monthly Meeting

**SNARS Monthly Meeting
(hybrid in-person & virtual Zoom)
Saturday, January 4th, 2025 at Jack's Café #2,
605 N. Wells Ave, Reno NV. Breakfast
In-Person 7 AM (breakfast), SNARS Meeting
at 8 AM both Zoom and in-person**

**PRESENTATION:
"ARRL Update" with
W7XM Anthony Marcin,
ARRL Pacific Division
Director**



**MEETING
NOTICE!**

SNARS In-Person/Zoom Meeting
Jack's Coffee Shop #2
Saturday, January 4th
REGISTER NOW!
Click for more info



To join in person or via Zoom, register here:
<https://snars.org/monthly-meeting/>



Weekday on the SNARS Linked System

147.030 + PL 123 – Sparks/Fernley
147.150 + PL123.0 – Lake Tahoe / Truckee
147.210 + PL 100.0 - Reno
444.875 + PL 100.0 - Yerington
146.925 - 123.0 – Lovelock / Fallon
146.67 – PL 123.0 - Winnemucca

Monday through Friday @ 12:00pm

Open to all amateur radio operators. A general informational net for the amateur radio community of

Nets on the SNARS Linked Systems

147.210 + 100.0 | 147.030 + 123.0 | 147.150 + 123.0
147.670 – 123.0 | 146.925 – 123.0 | 444.875 + 100.0

SNARS Noon Net	Mon—Fri @ 12:00pm
ERC Net for NV and Northern CA	Monday @ 9:15pm
N. Western NV ARES Net	Thursday @ 7:30pm
Northern Nevada Preppers Net	Wednesday @ 8:00PM
Hospital Net	Friday @ 10:00AM

Nets on Simplex/HF

Jefferson Noon Net	7.204 LSB	Daily - 12:00pm
6 Meter Net	50.350 USB	Tuesday – 8:00pm
2 Meter Weak Signal	144.250 USB	Wednesday - 8:00PM
2 Meter Simplex Net	146.500 FM	Thursday – 8:00PM
10 Meter Net	28.350 USB	Sunday – 2:00PM

Join us on SNARS Telegram Channel

Visit <https://snars.org/telegram/>



Telegram

a new era of messaging

Our official channel for members to communicate with each other via chat, ask questions and get the latest information about the club, repeater status and amateur



SNARS Weekly DMR Net

Tuesdays 8:00PM

SNARS Talk Group 31328

SNARS CALENDAR

SNARS Breakfast meeting (see page 3)

SNARS Board Meeting Wednesday, January 8, 6:00PM. Location and mode Chin Chin, Sparks, and on Zoom. Click on this link:

<https://snars.org/activities/meetings/>

The calendar is below the monthly meetings.

QCWA Meeting Saturday, January 11, 2025
11:00am – 1:00pm, Famous Dave's BBQ, 4925 Kietzke Lane, Reno NV

HAM RADIO ELMERING NIGHT on Zoom

7:00 PM Monday January 20, 2024 see

<https://snars.org/hamradionight/>

Reno QRP Group Meeting Tuesday, January 21, 11am – 12pm, Jack's Coffee Shop #2, 605 N Wells Ave, Reno, NV. Contact Ed, WD7Y WD7Y@sbcglobal.net for more info. If cancellation is needed, will be announced on the SNARS noon net.

Next months SNARS Breakfast Meeting, February 1, 7 AM (Zoom 8 AM). Location and

WELCOME NEW MEMBERS

AS OF December 29, 2024

Philip	Ferrando	KK7WYO
Paulette	Fernando	KK7WYZ
Craig	Dale	W9PAX
Jeremy	Benik	WX3JTB

THE NAME OF THE GAME

Jim Shepherd W6US

WHERE ARE THE TECHS?

About a third of the SNARS members have a Technician class license. Unfortunately, most of them are absent from club activities. Ham Radio Elmering Night is really for them to answer questions and learn about the various facets of Amateur Radio. When we started this 4 years ago we had 40 or so folks showing up, but this last month that dropped to 7 with only two Techs...

There is a tremendous amount of information that is not included in the question pool for the Technician License. A lot of new Techs come away from getting their license thinking that their only activity is to use a handheld and the local repeaters. A lot of old timers reinforce this thinking by pushing the use of cheap handhelds as the first radio that the new ham should have... These radios have very limited range, not only for simplex, but for hitting repeaters that are not visible.

Without a roof mounted antenna, either permanently mounted or a mag-mount, their use in a vehicle is very problematic. Cars are a leaky Faraday Cage and those with tinted windows are even worse as the tinting is usually a semiconductive material. Another factor is that you are using a 'handheld' device and there are laws against that in most jurisdictions.

A final strike against virtually all handhelds is that they are FM or digital voice only. To really get some distance with the VHF/UHF bands, you will need Single Sideband, CW, or one of the keyboard digital modes.

Did you know that a Technician can use 1500 watts on 6 or 2 meters to do moonbounce? From 6 meters on up on all

the ham bands, with a few minor exceptions that applies to all license classes, they can use full legal power if needed.

There are a number of ways to get more involvement by the techs in ham radio. A strong Elmering program where a new ham is paired with a knowledgeable experienced ham would go a long way toward their growth as an amateur radio operator.

Getting the techs on-the-air, especially on 10 meter SSB, is highly important to incorporating them into the ham radio experience for life... This is not happening—the recent 10 meter contest shows only 4 club members turned in a log—3 Extras, and one General—The club will be mentioned in QST, but near the bottom of the list... This is not only happening here, there were only 12 total logs turned in for this month's Rookie Roundup and none were technicians. In monitoring 10 meter FT8, I rarely see a newly issued callsign on the decoded list.

There are lots of unused HF radios out there gathering dust. Some are even donated to the club and could be issued out to an Elmer supported new ham. Other radios can be listed on the 'Ham Swap' page. These will go a long way to increasing the activity.

Getting the techs out for club meetings and other activities like operating at Field Day is important. We also need to get them involved in other things like repeater maintenance, antenna parties, and public service communications like races and other community events.

Ham Radio is a lifetime hobby, it is a shame to see so many dropping out when they get tired of kerchunking the repeaters and the battery on their handheld dies.

YULE (DEC. 21-JAN.1)

Wiccans and Neo-Pagans celebrate the winter solstice (the [darkest day of the year](#), on Dec. 21) through the festival of Yule. The winter solstice marks the shortest day and longest night of the year; Yule celebrates the re-emergence of the sun and the days beginning to grow longer again. The festival was first [celebrated in Scandinavia as a Norse festival](#).

A common tradition is [burning the yule log](#), which originally was done to celebrate the sun's return. It has since also been [folded into a Christmas tradition](#). In fact, Yule became associated with Christmas in the 9th century, although some still stick to the original Yule celebrations.

Submitted by **Don Sherman, W7SSB**

SNARS VOLUNTEERING

Thanks to all the SNARS our new 2025 Board of Directors:

Barry Bettman K6ST President, Krystal Nelson AJ6GC Vice-President
Anthony Marcin W7XM Secretary/Resident Agent, Doug Edmondo W7DBE
Treasurer, John Byerly N7ROJ Director, Jim Shepherd W6US Director, Greg
Krantz N7QT Director

Appreciation goes out to all seven of them who support SNARS this 2025 New Year.

Thank you for your contributions!
SNARS appreciates you!

Please feel free to reach out to me to see how you might be of service to the club in 2024!
With great appreciation,

K6ST Barry SNARS President k6st@arrrl.net
73, Barry K6ST
President, Sierra Nevada Amateur Radio Society
www.snars.org
Nevada Section Youth Coordinator
ARRL (American Radio Relay League)
www.arrrl.org
The national association for amateur radio



SHORT TAKES (By Jim Shepherd W6US)

CONTEST CALENDAR

The first major contest of the year is the ARRL RTTY Roundup. From 1800z this Saturday until 2400z on Sunday there will be lots of RTTY activity on the usual HF bands. Saturday, January 18th starting at 1900z is the ARRL VHF contest, and that is available to all hams, including those who only have a handheld. There is a FM class which allows you to use simplex communications. Setting up on a turnout on the Mt Rose Highway overlooking the Reno/Sparks, Washoe Valley, the Carson Valley, and points east can yield lots of contacts. January 25 starting at 1600Z is the Winter Field Day. These and other contest information can be found at <https://www.contestcalendar.com/contestcal.html>

DX

Lots of expeditions this month with the big catches will be in the warmer areas near the Equator and into the Southern Hemisphere. It seems that the big DX operations like to be on warm sunny beaches in places like Guadeloupe, Martinique, and American Samoa. More information can be found at <https://www.ng3k.com/Misc/adxo.html>

THIRD MONDAY ZOOM HAM RADIO NIGHT

We will have our popular Ham Radio Nights via ZOOM to get your questions answered. It will be held at 7pm on Monday, 20 January. We really need to see more people join in the discussions, especially the new hams. More information, including the link will be published before that date.

HAMFESTS/EVENTS

Las Vegas— On the first Saturday of every month, the local "HAMS" gather at the parking lot, the PETERSON CENTER 6455 Dean Martin Drive. The swap meet is a non-sponsored event. It is held rain or shine and on holidays. There is no charge to set up and sell at this gathering. Selling begins at sunrise and typically runs 2-3 hours, depending on the amount of items and buyers present.

There are a few hamfests down in Arizona, but the cooler weather has pretty much cancelled everything in this area...

QuartzFest in January down in Quartzsite Arizona is in the final planning stages, and a trip down there from here will also take some planning. More information at <https://quartzfest.org/>

NAME THAT RIG?

(Answer on page 12)



YOUTH INVOLVEMENT

ARRL KIDS DAY - SATURDAY, JAN 4TH, 2025

Speak with Kids on the ham radio bands
Share the excitement with your kids or grandkids, a Scout troop, a church or the general public!

More Info:

<https://www.arrl.org/Kids-Day>

73,

Barry K6ST
President, Sierra Nevada Amateur Radio Society (snars.org)
Nevada Section Youth Coordinator
ARRL (American Radio Relay League) arrl.org
The national association for amateur radio



Chameleon Antenna is looking for several new hires.

Full or part time!

Light assembly work and learning all aspects of the business.....

Contact Don Sherman, W7SSB

(775) 742-5165 donssherman@gmail.com

SNARS HAM RADIO ELMERING NIGHT

3rd Monday of each month at 7PM PT on Zoom



HAM RADIO ELMERING NIGHT

MONDAY JANUARY 20, AT 7:00 PM PST ON ZOOM

TOPIC BREAKOUT ROOMS

CW (Morse Code), VHF/UHF Analog, DMR/Fusion/Dstar

REGISTER HERE:

https://us06web.zoom.us/join/register/tZ0ldO-orz8uHNDRXnL1Rl6LiMqJQ_E5opiG

ARES NEWS

EVENT CALENDAR

EVENTS FOR 2024	DATE	DATE END	SPONSOR/ORGANIZER	COORDINATOR	CONTACT
One Day Ham Review for Technician & General question pool exam.	2/17/24		Washoe ARES	John Phillips	kl7ri@washoeares.org
Reno Off-Road & Motorsports Expo	3/22/24	3/24/24		ARLAN ROBINSON	ka7zau@washoeares.org
One Day Ham Review for Technician & General question pool exam.	4/20/24		Washoe ARES	John Phillips	kl7ri@washoeares.org
Stetina Paydirt	5/18/24		John Prouty; Bike Monkey	Arlan Robinson	ka7zau@washoeares.org
Silver State 50/50 race	5/18/24		Silver State Striders	Steve KS6A	ks6a@sbcglobal.net
NASTR 75/50/30 Horse Endurance	6/8/24		Nevada All-State Trail Riders, Inc	Arlan Robinson	ka7zau@washoeares.org
Lost and Found Gravel Grinder SBTS	6/15/24			Larry Trotter K16YUK	dltrotter@sbcglobal.net
America's Most Beautiful Bike Ride	6/2/24		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Pony Express Re-Ride	6/17/24	6/27/24	SIERA	Gerry Miller KJ7GEZ	hamspud35@gmail.com
One Day Ham Review for Technician & General question pool exam.	6/15/24		Washoe ARES	John Phillips	kl7ri@washoeares.org
Alta Alpina Challenge	6/29/24		Alta Alpina Cycling Club	Jennie Hamiter, KE7YBA	jenniehamiter@mac.com
Truckee Tahoe Gravel Race	6/29/24		John Prouty; Bike Monkey	Arlan Robinson	ka7zau@washoeares.org
Death Ride	7/13/24		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
TAHOE 200	7/14/24	7/18/24	Destination Trail Run	Todd Voigts KJ6DGG	kj6dgg@gmail.com
Tahoe Rim Trail	7/20/24	7/21/24	Tahoe Mountain Milers	Arlan Robinson	ka7zau@washoeares.org
Tahoe Rim Ride 50-Horse Endurance	7/27/24		Nevada All-State Trail Riders, Inc	Arlan Robinson	ka7zau@washoeares.org
Vegas to Reno Off Road Race	8/14/24	8/17/24	Best in the Desert Racing Assn	Keith KC7HTK	kc7htkeith@hotmail.com
One Day Ham Review for Technician & General question pool exam.	8/17/24		Washoe ARES	John Phillips	kl7ri@washoeares.org
Virginia City 100-Horse Endurance	9/21/24		Nevada All-State Trail Riders, Inc.	Arlan Robinson	ka7zau@washoeares.org
Tour De Tahoe	TBD		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Reno Air-Show	10/4/24	10/6/24	WC-ARES	Arlan Robinson	ka7zau@washoeares.org
Reno Jeep Festival	TBD		NV 4WD Assoc, Charles Doyle	Arlan Robinson	ka7zau@washoeares.org
Nevada Day Parade	10/28/24		NV AREA NW DEC	Tom Tobacco KE7NCJ	smokey5880@gmail.com
Scheels Turkey Trot	11/28/24		WC-ARES	Arlan Robinson	ka7zau@washoeares.org
One Day Ham Review for Technician & General question pool exam.	12/14/24		Washoe ARES	John Phillips	kl7ri@washoeares.org

ARES continued on following page.....

ARES NEWS continued from previous page.....

Welcome to 2025, Washoe County ARES News and Information. We are excited for the new year.

Washoe County ARES leadership would like to wish all of you a safe and Happy New Year. We hope that your holidays were wonderful for the year 2024.

We will be reviewing all events for the year 2025. The schedule should come out sometime in January or by early February. As soon as it's available it will be posted on the website at www.washoeares.org

Last year we had an opportunity to work with some new groups, Nevada All-State Trail Riders Inc. also the Reno Tahoe odyssey. Those are expected to continue in 2025.

Unfortunately the Reno Air Racing Association has not confirmed if they will return in 2025 with the Reno Airshow as of December 2024.

WC-ARES Is excited to announce that we will be participating in Scouts On The Airwaves. We need volunteers to help read questions to the Scouts at their ham review on February 22, 2025. From 9:00 AM to about 12:30 PM This is the first step to get young Scouts on the air. Also to help them gain their merit badge. Please go to WC-ARES website at www.washoeares.org to sign up to help with the Ham Review for Scouts.

I would like to recognize WC-ARES 2024 sponsors, Admiral Toy Storage, Future Graphics, Bike Monkey, Tahoe Mountain Milers, City of Sparks, Reno Tahoe odyssey, Nevada All State Trail Riders, and the Reno Air Racing Association.

WC-ARES Always accepts nonmembers to help with events. Keep your ears to the radio or eyes to the website www.washoeares.org. We would be very grateful if you could help with some upcoming events in 2025.

Please pass the word, I'm looking for volunteers to be net control for the Hospital 2m and DMR net on Fridays. The DMR starts at 9:00 AM to 9:55 AM.

Then at 10:00 AM the 2m starts. That net is about 30 minutes or less. You don't have to be an WC-ARES Member to be a net control operator for the

Hospital nets. If you are interested please contact me by e-mail at ka7zau@washoeares.org

ARES Training and Meetings are located at the REOC 5195 Spectrum Blvd in Reno on the first Saturday of the month. Starting time at 10:00 AM. We are always accepting new members and those that are newly licensed to become members of WC-ARES. You are always more than welcome to attend an ARES meeting as a guest.

Arlan Duwayne Robinson (KA7ZAU)

ARES- Washoe County Emergency Coordinator

Cell: (775) 233-3530

Website: www.washoeares.org

Email: ka7zau@washoeares.org

W7RN DOWNSIZING

Tom K5RC from the W7RN Comstock Memorial Station in Virginia City Highlands wants to let the SNARS members know, that he has antennas, & other parts he is downsizing. You can look at <https://www.w7rn.com/w7rn-downsizing-2/> to see what he has. Please email Tom Taormina, K5RC tom@k5rc.com for more information.

FROM THE W7RN WEBSITE

Over the years, we have accumulated a great deal of materials that are now excess to our needs. There are other hams that can benefit from the aluminum, coax, cables, etc. Most of it is free for the taking with a few items that have a price tag. Perhaps a Club member with room to store this stuff can be the new home for others to pick through. In any event, I really need to get it off my property. More important is that deserving hams can build projects once too costly to build. Call for an appointment and schedule a moving party as a Club Activity. 775-847-2360

Tom Taormina, K5RC ARRL Life Member
DXCC Top of Honor Roll (374 Mixed)
CQ Contest Hall of Fame (#50)
FOC #1760
CWOPS #108



Brand New Green Heron
rotator controller
Can be configured for
most rotators

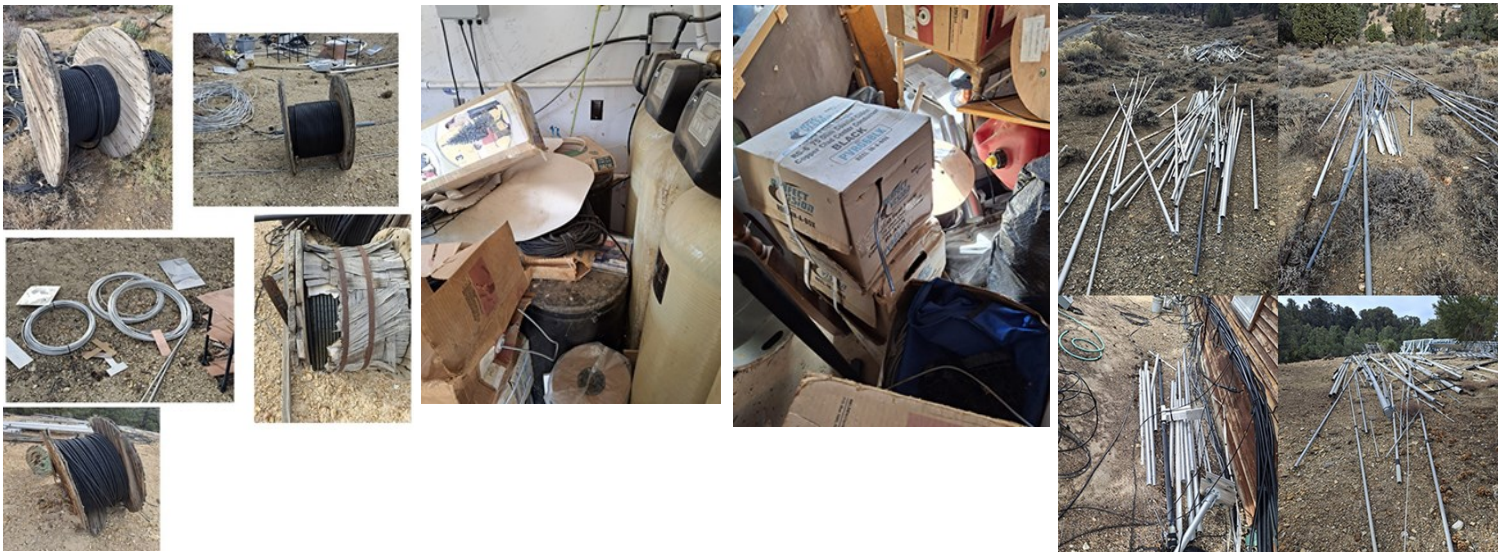
HDBX STYLE TOWER
\$50 PER SECTION



Longest Leg Measurement [ft in]	Across Flat [ft in]	Section Length [ft]	Number of sections [#]	Notes
1 3' 0"	2' 7"	8'		5 With Possible Top section
2 4' 0"	3' 6"	8'		5 With a mast and braces
3 3' 9"	3' 4"	8'		5 With possible top section
4 2' 8"	2' 3"	8'		4 with braces
5 2' 11"	2' 6"	8'		2 with a mast
6 2' 8"	2' 3"	8'		2 with braces

**Comstock Memorial
Station, W7RN**
www.w7rn.com

More pix of for sale/items free, too much to show all
NEXT PAGE



2M BEAM

6 M BEAM



440 BEAM

80 M 4 SQUARE
\$250.00



WORK PLATFORMS (2)
TRI-EX? US TOWER?
\$100 EACH



Still more pix on the W7RN website!

W7SSB's FUN PAGE

THE QUESTIONS I RECEIVE MOST BOTH THROUGH EMAIL AND PHONE CALLS ARE ABOUT SWR AND COUNTERPOISE USE!



What is SWR (standing wave ratio) it refers to a measurement of how well the antenna is matched to the transmission line coming from the radio, essentially indicating how much of the radio signal is being transmitted effectively

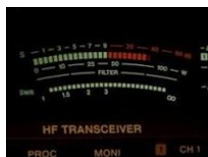
W7SSB truck and RV versus how much is reflected back due to impedance mismatch. A low SWR means a good match and efficient transmission, while a high SWR indicates poor signal transfer and potential damage to the radio.



STAND ALONE SWR METER

Now don't panic if you don't have a 1:1 SWR with your station!

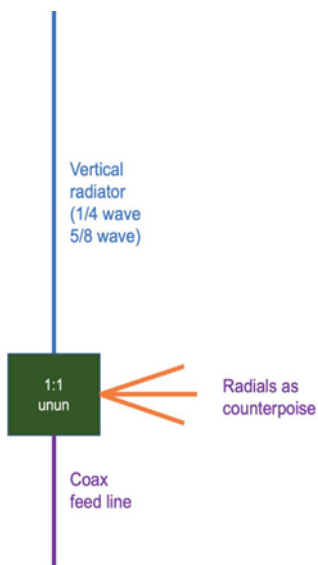
If your station has a 2:1 or less SWR you are ok! Most current transceivers will run fine with a 2:1 SWR. Protection circuits in today's transceivers will foldback power output or let the operator know with the swr meter that it is high. Remember your internal or external antenna tuner only satisfies the transceiver and not the antenna! If the antenna is 3:1 or more it still will be.



Typical SWR / Power Meter in HF Transceivers

COUNTERPOISE

With antennas it's all about completing the antenna circuit: An antenna, whether it's a dipole, vertical, or some other type, relies on a closed circuit for the flow of RF current. The counterpoise serves as the other half of this circuit, completing it. Without a counterpoise or ground plane, the antenna may not function optimally. RF energy will radiate inefficiently with a divergent radiation pattern. The counterpoise helps to improve the radiation efficiency of the antenna. When RF current is applied to the antenna, it creates an electromagnetic field around it. This field needs a return path to complete the circuit and radiate effectively. The counterpoise provides this return path, enabling the antenna to radiate efficiently. Especially HF antennas are often designed with reference to the Earth's surface serving as a ground plane. But not all antennas use 'real' ground. The counterpoise 'replaces' the ground. Without it, the antenna may not be resonant. Ideal radial system for base operations.

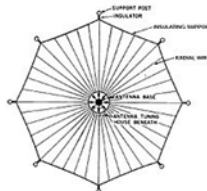


Simple vertical antenna with counterpoise

What is the length should I use for a counterpoise.

- 1. Depends on the type of antenna you are using.

- 2. Depends on the frequency .
- 3. Type of soil underneath the antenna.
- 4. What is around the antenna, (buildings, fencing, trees, etc).
- 5. Atmosphere.
- 6. How much room to layout the counterpoise wires, screen or material.
- 7. Whether raised off the ground or on the ground.



Simple diagram for a vertical antenna

Instead of having radials cut for every band you can use a compromised system with your own or a precut kit . It depends on how much room you have. 4,6,8 ft, or more than 25' may work for you. You may have to experiment with the amount and lengths .

I use a single raised radial 33' long on 40 meters off a tripod. I shortened it on some band changes on one of my portable setups. You might think about using a screen material



<https://www.youtube.com/watch?v=cVRkrVITgp0>

Roll it up and away you go! Faraday Cloth you can buy on Amazon. You also can buy a roll of aluminum window screen material from any hardware store.



<https://www.youtube.com/watch?v=CpnY6xOIL4> Vertical antenna set up/radials at the ocean.

<https://www.youtube.com/watch?v=yfnAUrh85R8> Good video for explaining the use of a radial system.

<https://www.youtube.com/watch?v=RxFOt1AevOU> Very good video building and using a radial system for vertical antennas.

<https://www.youtube.com/watch?v=o94BPtrotms> Using sting-elements as a counterpoise.

Next time I'll talk about common mode current/RF chokes and their use.

Stay tuned !

73,

Don Sherman, W7SSB donssherman@gmail.com



FUN STUFF FOR DECEMBER

All months are January, all times are Zulu! There are no less than FIVE ARRL or NCJ contests this month, all shown in BOLD! There's also a favorite of mine (editorial privilege too...) the Antique Wireless Assn Linc Cundall event, plus the CQ 160M contest, and the Winter Field Day and Australia Day events. NO state QSO parties!

4-1800 to 4-2359 3.5-14,18,21,24, 28,2-m rpters ARRL Kids Day Ph
www.arrl.org/kids-day

4-1800 to 5-2359 3.5-28 ARRL RTTY Roundup Dig www.arrl.org/rtty-roundup

11-1800 to 12-0559 1.8-28 North American QSO Party, CW
www.ncjweb.com/

15-2300 to 19-2300 1.8-14 AWA Linc Cundall Memorial CW
www.antiquewireless.org

18-1800 to 19-0559 1.8-28 North American QSO Party, SSB
www.ncjweb.com/

18-1900 to 20-0359 50 and up ARRL January VHF Contest CW Ph
Dig www.arrl.org/january-vhf

24-2200 to 26-2200 1.8 CQ 160m Contest, CW www.cq160.com

25-1600 to 26-2159 No WARC Winter Field Day CW PH DIG
www.winterfieldday.com

25-2200 to 26-1000 1.8-28 Australia Day Contest CW PH DIG
www.wia.org.au

If you want to see the full list, go [HERE](#)

DX FOR THIS MONTH

January is loaded with Africa stuff, plus some other plums like the Marianas, American Samoa, Marquesas, and St Helena (the most remote DX ever). Have a ball!

Dec 30	to Jan 03	Mariana KH0	
Jan 01	to Feb 08	Guyana	8R1TM
Jan 04	to Jan 05	Gambia	C5RK
Jan 10	to Jan 31	Benin	TY5C
Jan 11	to Jan 12	Senegal	6W1RD
Jan 12	to Jan 15	American Samoa KH8	
Jan 12	to Jan 27	Marquesas	TX7N
Jan 17	to Feb 02	Mozambique	C8K
Jan 21	to Feb 03	St Helena	ZD7DPX
Jan 27	to Feb 15	Rwanda	9X2AW

You might check with: <https://www.ng3k.com/Misc/adxo.html> to see if others have been cancelled or added to the list.

RENO QRP SLOW SPEED CW NET

NEXT NET SESSIONS WILL BE on January 9th and January 23rd at 11 AM Pacific Standard Time. As always, check with WD7Y@sbcglobal.net to confirm times. Target frequency 7.045 MHz, if busy search somewhere near that frequency.

THE FOLLOWING SHOULD ALWAYS BE IN YOUR REPORT:

NAME ,RST, LOCATION, RIG, POWER, ANTENNA.

REMEMBER TO INCLUDE RST IN YOUR REPORT

Feel free to add something else in your exchange.

Take some time to report RST for other OP's or anything else that comes to mind.

Sharing information about you and your equipment will accomplish two things.

First It gives you and everybody else practice sending and copying.
Second It is nice to spend time on the air with your friends. Consider this a QRP meeting on the air.

Relax and have some airtime fun with your friends.
73/72 Ed/WD7Y

NAME THAT RIG (From page 6)

The **Galaxy 300** was manufactured by none other than Leo Myerson, W0GFQ, of first Globe, then WRL fame. He founded the Galaxy Company. The **Galaxy 300** was the first of his new company's successes. The **Galaxy 300** was a three-band SSB/AM transceiver, which had CW as an afterthought. The **Galaxy 300** covered 3790 to 4000, 7200 to 7300, and 14200 to 14400Khz. It could be used in the CW mode, but it didn't have sufficient selectivity to be worth a darn on CW. The **Galaxy 300** only came with a 2.7 Khz IF filter. It used some 18 tubes including a pair of 6HF5 sweep tubes to produce an input of 170W PEP on single sideband, 170W on CW, and 70W in the AM mode. Sidebands were selectable, and the radio offered 1 uV sensitivity, typical for the era it was built in. Other features and performance on the **Galaxy 300** were not widely publicized. Galaxy also manufactured the Galaxy III, plus several versions of the GT550, Galaxy V, and the Galaxy V mk 2, before being sold to the Hy-Gain Company. Leo Myerson, W0GFQ, passed away in 2011 at the ripe old age of 100.

SNARS SILENT KEYS

IN MEMORY OF SNARS MEMBERS WHO RECENTLY PASSED AWAY.

If you know of a SNARS member or friend of SNARS who has passed away recently, submit it to me WB2AWQ@arrrl.net or any Board member for verification and inclusion on this page.

TOWER SAFETY PRESENTATION

There will be a presentation on tower safety and construction at the **Quarter Century Wireless Association** meeting on **January 11th at 11 am at Famous Daves BBQ at 4925 Kietzke Lane, Reno NV**. If you have a tower or are planning on getting one, this will be a good opportunity to get an introduction to the needed safety around the tower. You do not need to be a member of QCWA. The food is good, and everyone is invited.